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10/670,587	09/25/2003	Jinru Bian	010049US	7481

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EXAMINER

WEBB, GREGORY E

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 03/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/670,587

Applicant(s)

BIAN, JINRU

Examiner

Gregory E. Webb

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

The following is in response to the applicant's amendments and arguments filed 12/21/05.

### ***Claim Objections***

Claim 2 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Applicant's claim 1 specifically recites the requirement that the composition contain no abrasive particles. Claim 2, which depends from claim 1, recites a range of weight percentages specifically excluded by the parent claim.

Claim 2 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 2 does not further limit the parent claim as claim 1 already defines allowable weight percentages more narrowly than the child claim.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1751

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Based on the language used in claims 1 and 2, it is unclear to the examiner whether the abrasive compound is excluded from the composition or allowed to be in the composition at levels as high as 5 weight percent. Thus claim 2 is indefinite.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The applicant states in their arguments that imidazole is not a hydrazine. However, claim 8 clearly states that imidazole is a hydrazine. Thus either the applicant's arguments are incorrect or claim 8 incorrectly identifies the imidazole as a hydrazine.

### ***Response to Arguments***

The applicant argues several times that the imidazole is not a hydrazine. However, in instant claim 8, the applicant further defines the hydrazine and states that imidazole is a suitable hydrazine. As such these arguments are not convincing.

Art Unit: 1751

The applicant's claim 1 now excludes abrasives from the composition. Based on this amendment and the applicant's arguments, the following references and the corresponding rejections are withdrawn: Lee (US 6,436,834) for requiring the abrasive.

Concerning the Rothgery reference, the applicant argues that Rothgery's intended use teaches away from the instant composition's intended use. The applicant does not further argue any point with respect to the material limitations of the claim.

It should be noted that intended use recitations and other types of functional language cannot be entirely disregarded. However, in composition claims, intended use must result in structural difference between the claimed invention and the prior art in order to patentable distinguish the claimed invention from the prior art (see MPEP 2111.02). Furthermore, applicant may not rely upon the preamble to distinguish his claimed composition from that of the prior art, where the preamble does not constitute a limitation of a claim when it states a purpose or intended use (see *Loctite Corp. V. Ultraseal Ltd.*, 781 F.2d 861, 868, 228 USPQ 90, 94 (Fed. Cir. 1985)).

Whether to treat a preamble as a limitation is a determination “resolved only on review of the entire[ ] . . . patent to gain an understanding of what the inventors actually invented and intended to encompass by the claim.” *Corning Glass Works v. Sumitomo Electric U.S.A., Inc.*, 868 F.2d 1251, 1257, 9 USPQ2d 1962, 1966 (Fed. Cir. 1989); see also *Applied Materials, Inc. v. Advanced Semiconductor Materials Am., Inc.*, 98 F.3d 1563, 1572-73, 40 USPQ2d 1481, 1488 (Fed. Cir. 1996) (“Whether a preamble stating the purpose and context of the invention constitutes a limitation of the claimed process is determined on the facts of each case in light of the overall form of the claim, and the invention as described in the specification and illuminated in the prosecution history.”).

In general, a preamble limits the invention if it recites essential structure or steps, or if it is “necessary to give life, meaning, and vitality” to the claim. *Pitney Bowes*, 182 F.3d at 1305. Conversely, a preamble is not limiting “where a patentee defines a structurally complete

Art Unit: 1751

invention in the claim body and uses the preamble only to state a purpose or intended use for the invention.” *Rowe v. Dror*, 112

Additionally, dependence on a particular disputed preamble phrase for antecedent basis may limit claim scope because it indicates a reliance on both the preamble and claim body to define the claimed invention. *Bell Communications Research, Inc. v. Vitalink Communications Corp.*, 55 F.3d 615, 620, 34 USPQ2d 1816, 1820 (Fed. Cir. 1995) (“[W]hen the claim drafter chooses to use both the preamble and the body to define the subject matter of the claimed invention, the invention so defined, and not some other, is the one the patent protects.”). Likewise, when the preamble is essential to understand limitations or terms in the claim body, the preamble limits claim scope. *Pitney Bowes*, 182 F.3d at 1306. Further, when reciting additional structure or steps underscored as important by the specification, the preamble may operate as a claim limitation

Moreover, clear reliance on the preamble during prosecution to distinguish the claimed invention from the prior art transforms the preamble into a claim limitation because such reliance indicates use of the preamble to define, in part, the claimed invention. See generally *Bristol-Myers Squibb Co. v. Ben Venue Labs., Inc.*, 246 F.3d 1368, 1375, 58 USPQ2d 1508, 1513 (Fed. Cir. 2001) (A preamble may limit when employed to distinguish a new use of a prior art apparatus or process.). Without such reliance, however, a preamble generally is not limiting when the claim body describes a structurally complete invention such that deletion of the preamble phrase does not affect the structure or steps of the claimed invention. *IMS Tech., Inc. v. Haas Automation, Inc.*, 206 F.3d 1422, 1434, 54 USPQ2d 1129, 1136-37 (Fed. Cir. 2000) (preamble phrase “control apparatus” does not limit claim scope where it merely gives a name to the structurally complete invention). Thus, preamble language merely extolling benefits or features of the claimed invention does not limit the claim scope without clear reliance on those benefits or features as patentably significant.

Preambles describing the use of an invention generally do not limit the claims because the patentability of apparatus or composition claims depends on the claimed structure, not on the

Art Unit: 1751

use or purpose of that structure. In re Gardiner, 171 F.2d 313, 315-16, 80 USPQ 99, 101 (CCPA 1948) (“It is trite to state that the patentability of apparatus claims must be shown in the structure claimed and not merely upon a use, function, or result thereof.”). Indeed, “[t]he inventor of a machine is entitled to the benefit of all the uses to which it can be put, no matter whether he had conceived the idea of the use or not.” Roberts v. Ryer, 91 U.S. 150, 157 (1875).

More specifically, this means that a patent grants the right to exclude others from making, using, selling, offering to sale, or importing the claimed apparatus or composition for any use of that apparatus or composition, whether or not the patentee envisioned such use. See 35 U.S.C. § 271 (1994). Again, statements of intended use or asserted benefits in the preamble may, in rare instances, limit apparatus claims, but only if the applicant clearly and unmistakably relied on those uses or benefits to distinguish prior art. Likewise, this principle does not mean that apparatus claims necessarily prevent a subsequent inventor from obtaining a patent on a new method of using the apparatus where that new method is useful and nonobvious (Catalina Marketing International, Inc. v Coolsavings.Com, Inc. CAFC, 01-1324, 5/8/2002).<sup>1</sup>

Thus, as the applicant has not demonstrated in the arguments specifically how the instant claim's material limitations would differ in any way such rejections are maintained as all material limitations of the claim have been met.

### ***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

In addition to those previous rejections not withdrawn, the following are new rejections based on the applicant's amendments to the claims.

Art Unit: 1751

Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Wojtczak, William A. (US20020065204).

Concerning the preferred imines, guanidine and the tetramethylguanidine, Wojtczak, William A. teaches in paragraph 26 the use of tetramethylguanidine.

Concerning the preferred hydrazine, hydrazine and the imidazole, Wojtczak, William A. teaches the following:

7. The method of claim 1 wherein said organic amine(s) comprises a compound selected from the group consisting of: pentamethyldiethylenetriamine (PMDETA) monoethanolamine diglycolamine triethanolamine (TEA) diazabicyclo (2.2.2) octane diethylenetriamine 3,3'-iminobis (N,N-dimethylpropylamine) N-methylimidazole tetraethylenepentamine triethylenetetramine trimethoxyethoxyethylamine diethanolamine methyldiethanolamine tetramethylhexanediamine N,N-diethylethanolamine.(see claim 7)

Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Dewhurst (US5420188).

Concerning the preferred imines, guanidine and the tetramethylguanidine, Dewhurst teaches the following:

2 parts each of zinc oleate, zinc laurate and zinc stearate were dissolved in 4 parts of tetramethyl guanidine using the exact technique of Example 1. Clear liquids resulted in the cases of zinc oleate and zinc stearate, while a separated liquid resulted with zinc laurate.(see example 6)



Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Takagi (US6727042).

Concerning the preferred hydrazine, hydrazine and the imidazole, Takagi teaches the following:

The epoxy resin (B) is preferably used in combination with an epoxy curing agent in order to further improve adhesion, chemical resistance, heat resistance and other properties. Such epoxy curing agents include, for example, imidazoles, amines, guanamines, polyamines, triazine derivatives, tertiary amines, polyphenols, organophosphines, phosphonium salts, quaternary ammonium salts, and photocationic polymerization catalysts.

Examples of such epoxy curing agents are imidazoles such as

2-methylimidazole, 2-ethyl-4-methylimidazole, 2-phenylimidazole,

2-phenylimidazole, 2-undecylimidazole, 2-heptadecylimidazole,

1-benzyl-2-methylimidazole, 2-phenyl-4-methylimidazole,

1-cyanoethyl-2-methylimidazole, 1-cyanoethyl-2-phenylimidazole,

1-cyanoethyl-2-undecylimidazole, 2-phenyl-4,5-bis(hydroxymethyl)imidazole

and 2-alkylformylimidazoles; guanamines such as acetoguanamine and

benzoguanamine; amines such as diaminodiphenylmethane, m-phenylenediamine,

m-xylylenediamine, diaminodiphenyl sulfone, dicyandiamide, urea and urea

derivatives; guanamines such as acetoguanamine and benzoguanamine;

polyamines such as melamine, polybasic hydrazide, or organic acid salts

Art Unit: 1751

and/or epoxy adducts of these compounds, and boron trifluoride amine complex; triazine derivatives such as ethylamino-S-triazine, 2,4-diamino-S-triazine, 2,4-diamino-S-triazine and 2,4-diamino-6-xylyl-S-triazine; tertiary amines such as trimethylamine, triethanolamine, N,N-dimethyloctylamine, N-benzyl dimethylamine, pyridine, N-methylmorpholine, hexa(N-methyl)melamine, 2,4,6-tris(dimethylaminophenol) and tetramethylguanidine; polyphenols such as polyvinylphenol, polyvinylphenol bromides, phenol novolaks, and alkylphenol novolaks; organophosphines such as tributylphosphine, triphenylphosphine and tris-2-cyanoethylphosphine; phosphonium salts such as tri-n-butyl(2,5-dihydroxyphenyl)phosphonium bromide, hexadecyltributylphosphonium bromide and hexadecyltributylphosphonium bromide; quaternary ammonium salts such as benzyltrimethylammonium chloride, phenyltributylammonium chloride and other derivatives; as well the aforementioned saturated or unsaturated polybasic acid anhydrides, diphenyliodonium tetrafluoroborate, triphenylsulfonium hexafluoroantimonate, 2,4,6-triphenylthiopyridinium hexafluorophosphate, iron-arene complexes and other photocationic polymerization catalysts; conventional curing agents or curing accelerators for use in the reaction of styrene-maleic acid resin. Each of these compounds can be used alone or in combination. The amount of the epoxy resin curing agent is preferably 0.01 to 25 parts by weight and more preferably 0.1 to 15 parts by weight

Art Unit: 1751

relative to 100 parts by weight of the epoxy resin (B).(see cols. 5-6)

### ***Conclusion***

1. It is no longer clear to the examiner which compounds are defined by formulae I and II. The applicant both claims specific compounds such as the imidazole, see claim 8, as meeting these formula and then argues that they do not meet the formula. Thus it is unclear to the examiner which compounds are encompassed by the claimed chemical formulae.

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

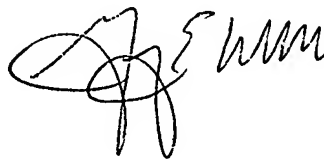
Art Unit: 1751

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory E. Webb whose telephone number is 571-272-1325.

The examiner can normally be reached on 9:00-17:30 (m-f).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglass McGinty can be reached on **(571)272-1029**. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Gregory E. Webb  
Primary Examiner  
Art Unit 1751

gew